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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/640,349	08/12/2003	Yi-Fang Michael Shiuan	JCLA11051	7717
23900	7590	12/13/2005	EXAMINER	
J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			PIZIALI, JEFFREY J	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/640,349

Applicant(s)

SHIUAN ET AL.

Examiner

Jeff Piziali

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (see Pages 4 and 5 in the Specification). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
- Page 6, lines 1-2: All occurrences of "CUP" should be changed to "CPU."
- Page 17, line 20: The term "occur" should be changed to "occurring."
- Appropriate correction is required.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Independent claims 1, 5, 8, and 12 each recite the limitation of "executing a power saving process." There is insufficient antecedent basis for this limitation in the claims. In particular, it would be unclear to one skilled in the art what the comparative basis is for the aforementioned "power saving process." Is there a power savings compared to some other undefined operating mode of the CPU? Or is there a power savings compared to a conventional toaster oven (as one facetious example)?

7. The term "around the time" in claim 16 is a relative term which renders the claim indefinite. The term "around the time" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It would be unclear to one skilled in the art how close in time the blank periods would have to be to the reference blank period before constituting "around the time."

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8. Claims 2-4, 6, 7, 9-11, and 13-15 are rejected under 35 U.S.C. 112, second paragraph, for simply being dependent upon rejected base claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipate by Shelton et al. (US 6,046,709 A).

Regarding claim 1, Shelton discloses a graphics display method for continuously displaying graphics data on multiple display devices [Fig. 1; 113, 114, 116] of a computer [Fig. 1; 100, 102, 104] (see Column 6, Lines 11-27) that contains a system memory [e.g. frame buffer] directly accessed by a CPU [Fig. 2; 208, 210, 218, 220] (see Column 4, Lines 18-35), the method comprising: using a common clock source [Fig. 4; 420] to synchronize blank periods of the display devices (see Column 15, Lines 17-24); receiving a power saving signal [Fig. 4; 404] from the CPU (see Column 15, Lines 8-16), said power saving signal indicates a request for executing a power saving process [e.g. not refreshing every display device as fast as possible]; and executing the power saving process [i.e. frame locking] within the least common multiple occurrence of the blank periods of the display devices (see Column 4, Lines 47-64).

Regarding claim 2, Shelton discloses a step of detecting the upcoming least common multiple occurrence of the blank periods of the display devices before the executing step (see Column 10, Lines 20-43).

Regarding claim 3, Shelton discloses the blank period can be a horizontal blank period or a vertical blank period (see Column 3, Lines 10-25).

Regarding claim 4, Shelton discloses the horizontal blank period or the vertical blank period is provided by a graphics-processing unit [Fig. 2; 208, 210, 218, 220] (see Column 8, Lines 6-20).

Regarding claim 5, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, Shelton discloses detecting an upcoming overlapping blank period of the display devices that is long enough for the power saving process to take place; and executing the power saving process within the overlapping blank period of the display devices (see Column 4, Lines 47-64).

Regarding claim 6, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 7, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 8, this claim is rejected by the reasoning applied in rejecting claims 1 and 5; furthermore, Shelton discloses marking the last blank period occurrence of the display devices as a reference [i.e. slowest] blank period; extending the blank periods of the other [i.e. faster] display devices to a time where all the display devices have an overlapping blank period longer than a power saving process period; and executing the power saving process [i.e. frame locking] within the overlapping blank period (see Column 4, Lines 47-64).

Regarding claim 9, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 11, Shelton discloses obtaining a length of the power saving process period from the CPU before the step of extending (see Column 16, Line 67 - Column 17, Line 24).

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claims 1, 5, and 8; furthermore, Shelton discloses aligning the blank periods of the other [i.e. faster] display devices with the reference [i.e. slowest] blank period so the display devices have an overlapping blank period longer than a power saving process period (see Column 5, Lines 16-44).

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 4.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 11.

Regarding claim 16, Shelton discloses aligning the blank periods of the other [i.e. faster] display devices with the reference [i.e. slowest] blank period is to force the blank periods of the other display devices to occur at around the time the reference blank period takes place (see Column 4, Lines 47-64).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yang et al. (US 2004/0255170 A1), Shiuan et al. (US 2004/0075621 A1), Shiuan et al. (US 6,919,899 B2), Wasserman et al. (US 6,784,881 B2), Wasserman et al. (US 6,654,021 B2), Ikonen et al. (US 6,473,078 B1), Inamori (US 6,340,959 B1), Glen et al. (US 6,067,083 A), Shimizu et al. (US 5,861,879 A), Ranganathan (US 5,615,376 A), and Singhal et al. (US 5,488,385 A) are cited to further evidence the state of the art pertaining to graphics display methods.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



J.P.

9 December 2005



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